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SHORT REPORT

Job satisfaction and short-term sickness absence among Dutch workers

Annette Notenbomer¹, Corné A. M. Roelen¹ and Johan W. Groothoff²

Background	Sickness absence is a considerable economic and social problem. Short-term sickness absence is known to be associated with behavioural attitudes. The correlation between sickness absence and job satisfaction has been studied infrequently and with contradictory results.
Aims	This study investigated the correlation between short-term sickness absence and both global and specific job satisfaction. We defined short-term sickness absence as spells of up to 42 days.
Methods	A random sample of 898 Dutch workers from a variety of economic sectors and companies received a self-report questionnaire on their first day of sick leave. The questionnaire measured global and specific job satisfaction. In our regression analysis, we controlled for the confounding factors of age, gender, educational level, perceived workload, job autonomy and decision latitude. The duration of an absence spell was defined as the amount of calendar days between sick leave and return to work.
Results	Global job satisfaction did not correlate significantly with the duration of short-term sickness absence. While increasing physical job demands predicted longer absence, increasing job autonomy and educational level predicted shorter absence. Satisfaction with colleagues predicted longer duration absence.
Conclusion	Global job satisfaction did not correlate with the duration of short-term absence spells, but specific satisfaction with colleagues was associated with longer sickness spells.
Key words	Global job satisfaction; short-term sickness absence; specific job satisfaction.

Introduction

Sickness absence has medical and behavioural aspects. Hackett and Guion [1] assessed the behavioural attitudes of sickness absence and recommended that the perceptions of workers should be taken into account when investigating sickness absence. The perception of workers is reflected in job satisfaction. There is considerable research on job satisfaction, but only a few studies have investigated its correlation with sickness absence. Some studies conclude that dissatisfaction prolongs sickness absence while others report that job satisfaction is not related to the duration of absence. This study examined the correlation between short-term sickness absence and both global and specific job satisfaction. Based on our experience, we hypothesized that low satisfaction

is associated with relatively longer absence spells within the first 6 weeks of sick leave.

Method

To test this hypothesis, we sent a valid and reliable self-report questionnaire to 898 workers on their first day of sick leave. The workers were drawn randomly from a total population of 1908 people who were absent due to sickness in the period January to April of 2003. The questionnaire collected information on global and specific job satisfaction using single-item measures [2,3] on a seven-point Likert scale, ranging from 1 (i.e. very dissatisfied) to 7 (i.e. very satisfied). Self-reported physical and psychological workload, job autonomy and decision latitude were also investigated using a seven-point Likert scale. Data on sickness absence were retrieved from the occupational health register. Duration of sickness absence was defined as the amount of calendar days from the first day of registered sick leave to the day of return to work. Partial days off of work were regarded as full sick days. Workers who were registered sick for longer than 6 weeks were excluded from this study, since sickness

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absence over 42 days is known to be driven by medical rather than behavioural factors [4]. According to national Dutch law, approval from a medical ethics review board was not required.

Data were analysed using SPSS for Windows. The distribution of the duration of sickness absence was skewed to the right and normal distribution was approximated after logarithmic transformation. In our regression analysis, the log-transformed duration of the absence spells was the dependent variable. We controlled for the confounding factors of age, gender, educational level, perceived workload, job autonomy and decision latitude. All these variables were checked for co-linearity which was found to be absent.

Results

Of the 898 questionnaires handed out, 518 (58%) were returned. We expected the selection bias caused by the relatively low response to be small, because sickness absence duration among non-responders was similar to that of the responders: the mean duration of absence spells was 10.9 ± 14.4 days among responders ($n = 518$) and 9.3 ± 16.3 days among non-responders ($n = 380$). Seventy questionnaires were excluded: 49 workers were on sick leave for longer than 6 weeks, nine workers were not sick but on pregnancy leave, six questionnaires were not filled out completely and six questionnaires were returned anonymously.

A total of 448 questionnaires were suitable for statistical analysis. Table 1 shows the scores of global satisfaction, (physical and psychological) job demands, job autonomy and decision latitude as well as their associations with sickness duration.

Global job satisfaction was not correlated with the duration of short-term absence spells (correlation coefficient $\beta = -0.010$ with $P = 0.84$). The correlation between satisfaction on specific parameters of work and the duration of short-term absence is shown in Table 2.

Satisfaction with colleagues correlated positively (correlation coefficient $\beta = 0.125$ with $P = 0.03$) with sickness absence duration, i.e. workers who were more satisfied with their colleagues were absent longer.

Discussion

Our study found that increasing satisfaction with colleagues and physical demands at work predicted longer duration of absence whereas increasing educational level and job autonomy predicted shorter duration. Unexpectedly, global job satisfaction was not correlated with the duration of short-term absence spells. The reason for this may be that the questionnaires were not anonymous, leading to socially desirable answers which could have underestimated the results. Nevertheless, a correlation between global satisfaction and sickness absence duration remains unlikely because of the low correlation coefficient. Besides, the findings regarding educational level, job autonomy and physical job demands correspond with literature findings, and suggest that socially desirable answers did not play a major role. Therefore, we rejected our hypothesis that low job satisfaction is associated with longer short-term absence spells.

High satisfaction with colleagues predicted longer duration of short-term sickness absence. Probably, workers who are very satisfied with their colleagues find it harder to report themselves sick, and go to work despite feeling ill (sickness presenteeism). As a result, they would only report themselves sick with severe illness or symptoms, which explains why they are absent longer. Aronsson *et al.* [5] reported that sickness presenteeism was supported by low-level sick pay. They also described that members of occupational groups in which replacement is difficult have an increased risk of being at work when sick. In addition to these factors, high satisfaction with colleagues seems to contribute to sickness presenteeism. Alternatively, it is possible that high levels of

Table 1. Scores of global satisfaction, age, educational level and work factors and their correlation with sickness absence duration

	Mean \pm SD	B \pm SE	β
Global satisfaction (range 1–7)	5.3 \pm 1.3	–0.003 \pm 0.014	–0.010
Age (years)	38.1 \pm 10.2	0.003 \pm 0.002	0.065
Gender (male = 1, female = 0)		–0.030 \pm 0.038	–0.037
Educational level (range 1–3)	1.7 \pm 0.6	–0.067 \pm 0.027	–0.116*
Physical demands (range 1–7)	3.9 \pm 1.9	0.029 \pm 0.011	0.142**
Psychological demands (range 1–7)	4.2 \pm 1.7	–0.023 \pm 0.014	–0.096
Job autonomy (range 1–7)	5.3 \pm 1.4	–0.048 \pm 0.018	–0.171**
Decision latitude (range 1–7)	4.8 \pm 1.7	0.013 \pm 0.017	0.059

Mean \pm SD of global satisfaction, age, educational level and work factors and their correlation with log-transformed duration of sickness absence; B is the unstandardized correlation coefficient and SE is its standard error; β is the standardized regression coefficient which is a measure for the type (positive or negative) and the relative importance of the correlation with sickness absence duration.

* $P < 0.05$ and ** $P < 0.01$.

Table 2. The scores of specific satisfaction dimensions and their correlation with sickness absence duration

Specific satisfaction (range 1–7)	Mean \pm SD	B \pm SE	β
Work itself			
Time to complete work	4.7 \pm 1.4	–0.009 \pm 0.019	–0.033
Amount of work	4.7 \pm 1.4	–0.002 \pm 0.022	–0.008
Variation in work	5.0 \pm 1.4	–0.008 \pm 0.019	–0.028
Working conditions	4.7 \pm 1.5	–0.005 \pm 0.018	–0.017
Workplace social contacts			
Colleagues	5.6 \pm 1.2	0.040 \pm 0.018	0.125*
Supervisor	4.8 \pm 1.7	0.012 \pm 0.017	0.050
Work briefings	4.3 \pm 1.7	–0.030 \pm 0.017	–0.135
Terms of employment			
Work times	5.5 \pm 1.3	0.005 \pm 0.017	0.017
Payment	4.3 \pm 1.5	0.013 \pm 0.015	0.053
Career prospects	4.2 \pm 1.7	0.012 \pm 0.016	0.050

Mean \pm SD scores of the specific satisfaction items and their correlation with log-transformed duration of sickness absence; B is the unstandardized correlation coefficient and SE is its standard error; β is the standardized regression coefficient which is a measure for the type (positive or negative) and the relative importance of the correlation with sickness absence duration.

* $P < 0.05$ and ** $P < 0.01$.

co-worker support may encourage people to stay at home longer when they are ill, as was suggested by Rael *et al.* [6] from the Whitehall II study.

Satisfaction with colleagues correlates with short-term sickness absence duration, but satisfaction with the supervisor is not associated with it. This suggests that the relation with colleagues is more important for the return to work than the relation with the supervisor, as far as short-term absence is concerned. Nieuwenhuijsen *et al.* [7] reported that supervisory behaviour is an important predictor of return to work. We assume that supervisory behaviour has more influence on long-term sickness absence. However, further research is necessary to study the correlation between job satisfaction and long absence spells.

Key points

- Global job satisfaction does not correlate with the duration of short-term sickness absence.
- Satisfaction with colleagues is positively associated with short-term sickness absence, whereas satisfaction with the supervisor is not associated with its duration.
- Sickness presenteeism and confiding co-worker's support are discussed as possible causal mechanisms behind the finding that high satisfaction with colleagues is associated with longer sick spells.

Conflicts of interest

None declared.

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